

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE .	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,674	11/13/2003	Frederick Wilkins	10168-7075.19	9082
37462 7590 06/28/2007 LOWRIE, LANDO & ANASTASI			EXAMINER	
RIVERFRONT	OFFICE		PHASGE, ARUN S	
ONE MAIN ST CAMBRIDGE,	REET, ELEVENTH F MA 02142	LOOR	ART UNIT	PAPER NUMBER
· · · · · · · · · · · · · · · · · · ·		1753		
	•		MAIL DATE	DELIVERY MODE
			06/28/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No. Applicant(s)					
		10/712,674	WILKINS ET AL.				
	Office Action Summary	Examiner	Art Unit				
		Arun S. Phasge	1753				
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	orrespondence address				
WHIC - Exter after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE in a sign of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. In period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim fill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	I. ely filed the mailing date of this communication. O (35 U.S.C. § 133).				
Status							
1)□	Responsive to communication(s) filed on						
·	· · ·	action is non-final.					
•==	Since this application is in condition for allowar		secution as to the merits is				
,	closed in accordance with the practice under E	•					
Dispositi	on of Claims						
4)⊠	Claim(s) <u>1-32</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrav	vn from consideration.					
5)	Claim(s) is/are allowed.						
6)⊠	☑ Claim(s) <u>1-32</u> is/are rejected.						
	Claim(s) is/are objected to.						
8)[Claim(s) are subject to restriction and/or	election requirement.					
Applicati	on Papers						
9) 🗌 🤈	The specification is objected to by the Examine	. ,					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
	Applicant may not request that any objection to the o	= : :					
. —	Replacement drawing sheet(s) including the correcti	-					
11)[The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority u	nder 35 U.S.C. § 119						
_	Acknowledgment is made of a claim for foreign ☐ All b) ☐ Some * c) ☐ None of:	priority under 35 U.S.C. § 119(a)	-(d) or (f).				
	1. Certified copies of the priority documents						
	2. Certified copies of the priority documents						
	3. Copies of the certified copies of the prior		d in this National Stage				
* S	application from the International Bureau ee the attached detailed Office action for a list of		4				
	or the allastica asiana amos asion for a list of		. .	•			
Attachma=	(c)						
Attachment 1) ⊠ Notic	e of References Cited (PTO-892)	4) Interview Summary (PTO-413\				
2) 🔲 Notic	e of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	te				
	nation Disclosure Statement(s) (PTO/SB/08) · No(s)/Mail Date	5) Notice of Informal Pa	atent Application				
		, <u> </u>					

Application/Control Number: 10/712,674

Art Unit: 1753

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1,172,145 in view of Briggs, U.S. Patent 2,535,035 and Bianchi et al. (Bianchi), U.S. Patent 4,830,721.

The Ep patent is cited to show a conventional electrodeionization cell, wherein water is purified (see figures 1-4).

The patent fails to disclose the feeding through the cathode to control pH or the addition of hydrogen to reduce the corrosiveness of the water.

The Briggs patent is cited to show it is well recognized to control the pH of water that has been electrochemically treatment by feeding it through the cathode to obtain the desired pH. Likewise, the Bianchi patent is cited to show the use of hydrogen to reduce the corrosiveness of deionized water (see claims 1-7).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the disclosure of the EP patent with the teachings of the secondary references, because the secondary references teach the feeding through the cathode compartment to control the pH and reduce corrosiveness of water.

Conclusion -

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arun 5. Phasge whose telephone number is (571) 272-1345. The examiner can normally be reached on MONDAY-THURSDAY, 7:30-6:00.

Art Unit: 1753

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X. Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Arun S. Phasge Primary Examiner

Art Unit 1753